

STN Columbus

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 JUL 20 Powerful new interactive analysis and visualization software,
STN AnaVist, now available
NEWS 4 AUG 11 STN AnaVist workshops to be held in North America
NEWS 5 AUG 30 CA/CAPlus -Increased access to 19th century research documents
NEWS 6 AUG 30 CASREACT - Enhanced with displayable reaction conditions
NEWS 7 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS 8 OCT 03 MATHDI removed from STN
NEWS 9 OCT 04 CA/CAPlus-Canadian Intellectual Property Office (CIPO) added
to core patent offices
NEWS 10 OCT 06 STN AnaVist workshops to be held in North America
NEWS 11 OCT 13 New CAS Information Use Policies Effective October 17, 2005
NEWS 12 OCT 17 STN(R) AnaVist(TM), Version 1.01, allows the export/download
of CAPlus documents for use in third-party analysis and
visualization tools

NEWS EXPRESS JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

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of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:19:39 ON 18 OCT 2005

=> fil reg

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|---------------------|------------------|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 14:19:53 ON 18 OCT 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 17 OCT 2005 HIGHEST RN 865410-76-0

DICTIONARY FILE UPDATES: 17 OCT 2005 HIGHEST RN 865410-76-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

```
*****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005. A new display format, IDERL, is now     *
* available and contains the CA role and document type information. *
*
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> s 574-93-6/rn

L1 1 574-93-6/RN

=> d rid

'RID' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure -. no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
SQD3 - Same as SQD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties
EPROP - Table of experimental properties
PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification

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PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):rsd

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

Ring System Data

| Elemental Analysis EA | Elemental Sequence ES | Size of the Rings SZ | Ring System Formula RF | Ring Identifier RID | RID Occurrence Count |
|-----------------------------|-----------------------------|----------------------------|------------------------------|---------------------------|----------------------------|
| C4N-C4N-C4N- | NC4-NC4-NC4- | 5-5-5-5-6-6- | C32N8 | 13560.6.4 | 1 |
| C4N-C6-C6-C6- | NC4-C6-C6-C6- | 6-6-16 | | | |
| C6-C8N8 | C6- NCNCNCNCNCNCN CNC | | | | |

=> s 23627-89-6/rn
L2 1 23627-89-6/RN

=> d rsd

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

Ring System Data

| Elemental Analysis EA | Elemental Sequence ES | Size of the Rings SZ | Ring System Formula RF | Ring Identifier RID | RID Occurrence Count |
|-----------------------------|-----------------------------|----------------------------|------------------------------|---------------------------|----------------------------|
| C4N-C4N-C4N- | NC4-NC4-NC4- | 5-5-5-5-6-6- | C48N8 | 14242.1.1 | 1 |
| C4N-C6-C6-C6- | NC4-C6-C6-C6- | 6-6-6-6-6-6- | | | |
| C6-C6-C6-C6- | C6-C6-C6-C6- | 16 | | | |
| C6-C8N8 | C6- NCNCNCNCNCNCN CNC | | | | |

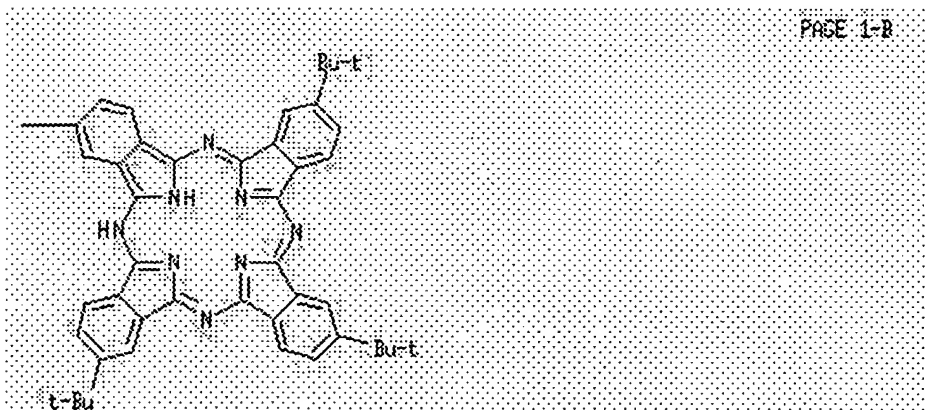
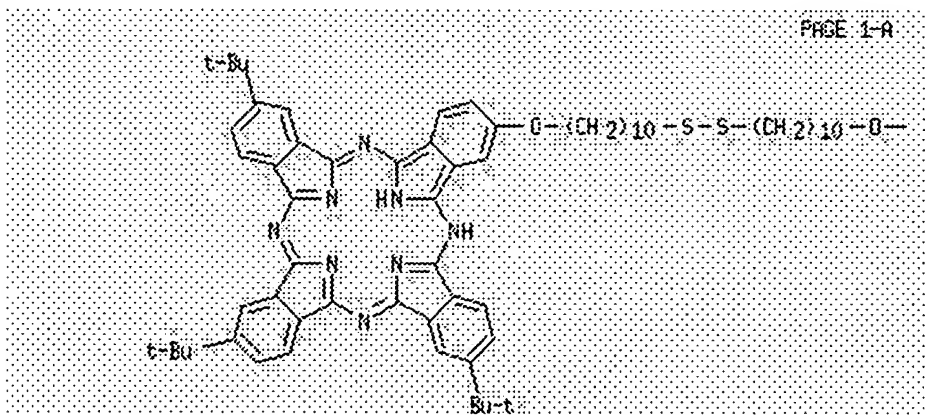
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      8454941 2/RID.CNT
      1822 13560.6.4/RID
L3      34 2 13560.6.4/RID
      (2/RID.CNT (T) 13560.6.4/RID)
```

```
=> s 13 and nc=1
      79137461 NC=1
L4      33 L3 AND NC=1
```

```
=> s 14 and o/els
      22771773 O/ELS
L5      27 L4 AND O/ELS
```

```
=> d scan
```

```
L5 27 ANSWERS  REGISTRY  COPYRIGHT 2005 ACS on STN
IN 29H,31H-Phthalocyanine, 2,2'-[dithiobis(10,1-decanediylloxy)]bis[9,16,23-
MF C108 H122 N16 O2 S2
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 29H,31H-Phthalocyanine, 2,2'-[(2-ethyl-2-methyl-1,3-propanediyl)bis(oxy)]bis[9,10,16,17,23,24-hexakis(3,3-dimethyl-1-butynyl)-(9CI)

MF C142 H142 N16 O2

PAGE 1-A

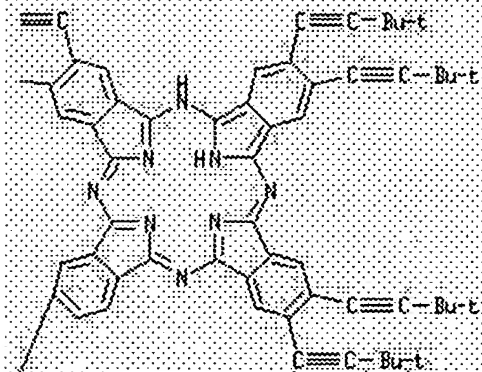
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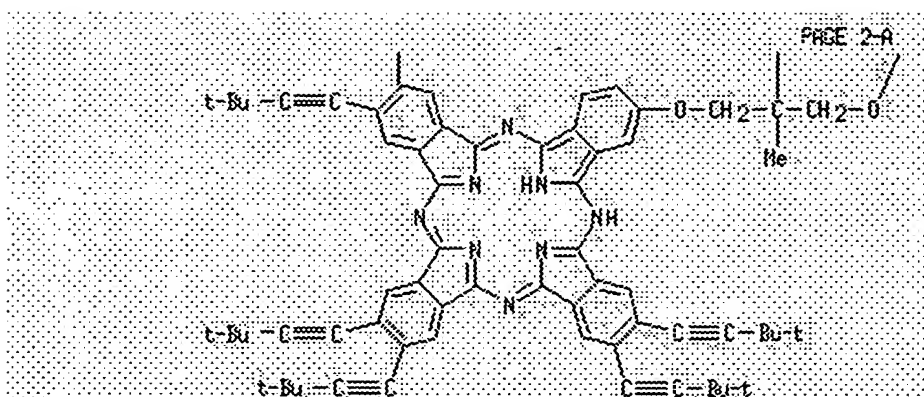
t-Bu-C≡C-

t-Bu-C≡C-

Et

PAGE 1-B





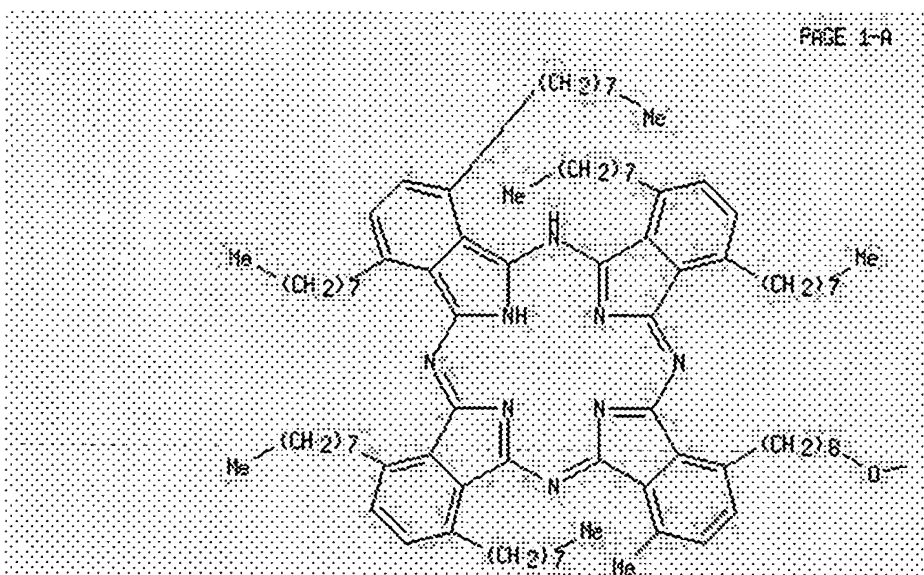
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

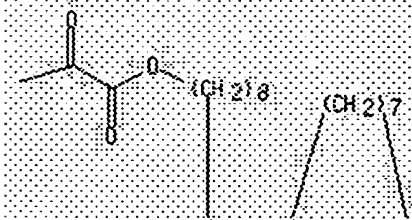
L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN Ethanedioic acid, bis[8-(4-methyl-8,11,15,18,22,25-hexaoctyl-29H,31H-phthalocyanin-1-yl)octyl] ester (9CI)

MF C180 H262 N16 O4



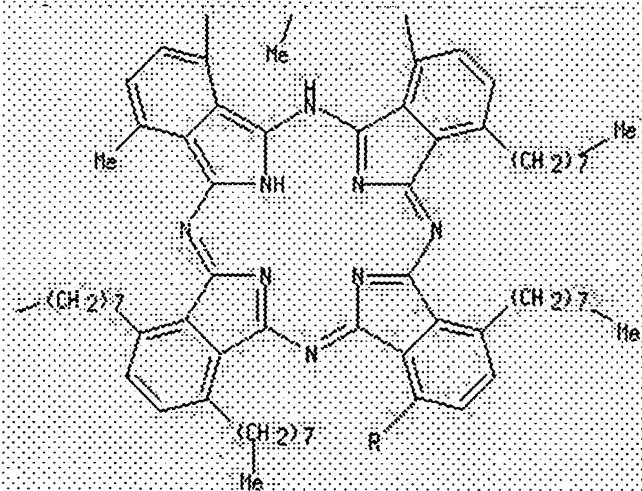
PAGE 1-B



PAGE 2-A

Me

PAGE 2-B



PAGE 3-A



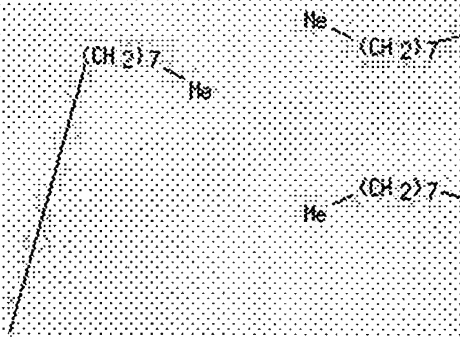
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) .

L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

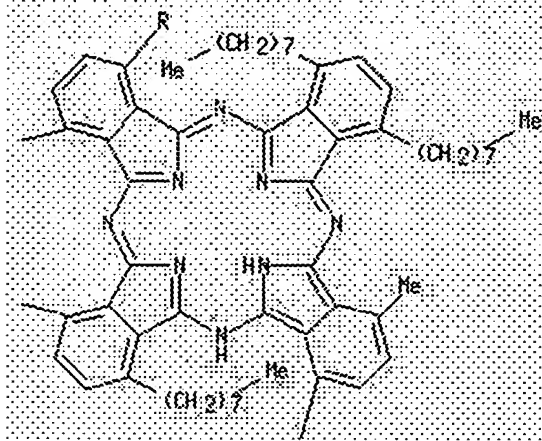
IN Ethanedioic acid, bis[4-(4-methyl-8,11,15,18,22,25-hexaoctyl-29H,31H-phthalocyanin-1-yl)butyl] ester (9CI)

MF C172 H246 N16 O4

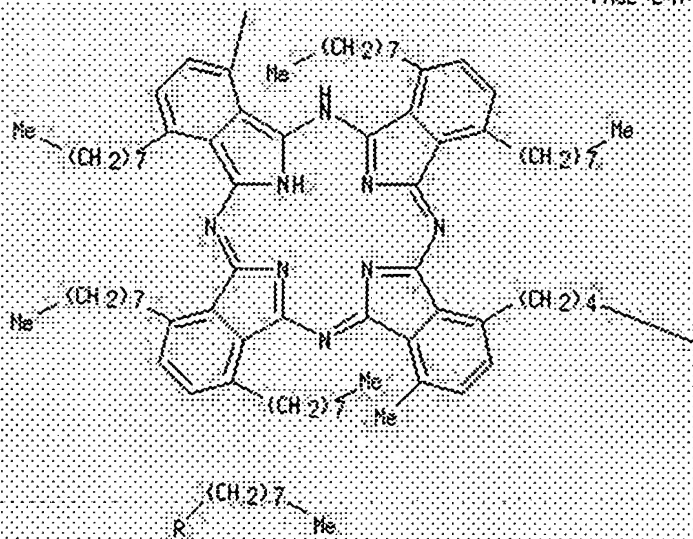
PAGE 1-A



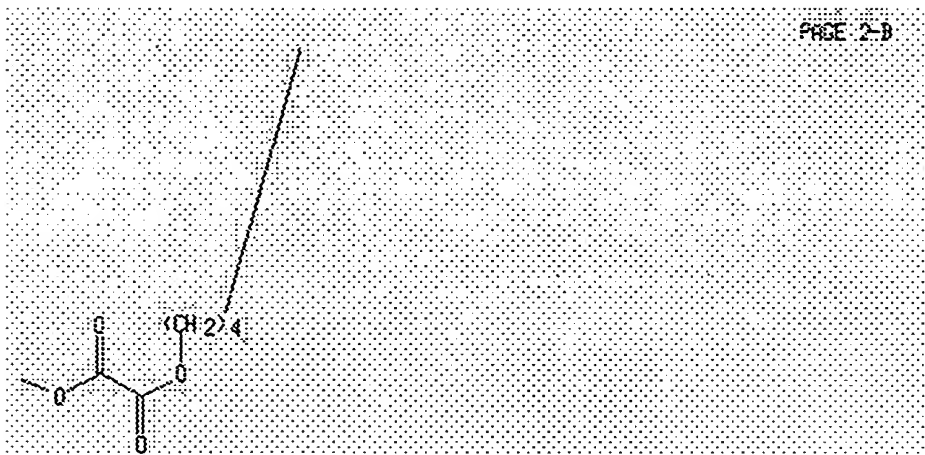
PAGE 1-B



PAGE 2-A



PAGE 2-B



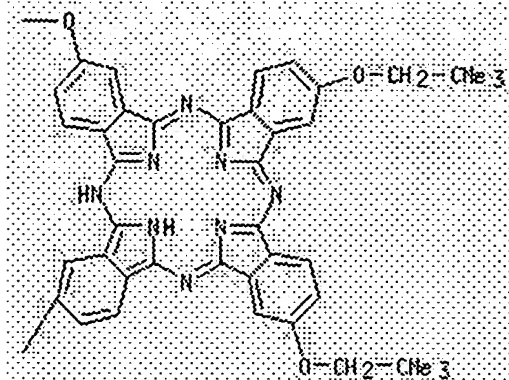
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) .

L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN 29H,31H-Phthalocyanine, 2,2'-(1,2-ethenediyl)bis[9,16,23-tris(2,2-dimethylpropoxy)-, (E)- (9CI)
 MF C96 H96 N16 O6

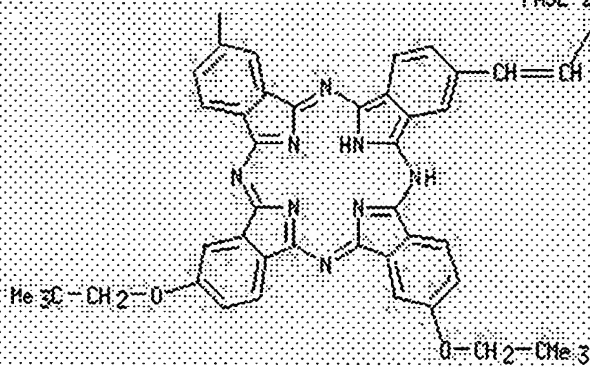
PAGE 1-A

Me 3C-CH₂-Me 3C-CH₂-O

PAGE 1-B



PAGE 2-A

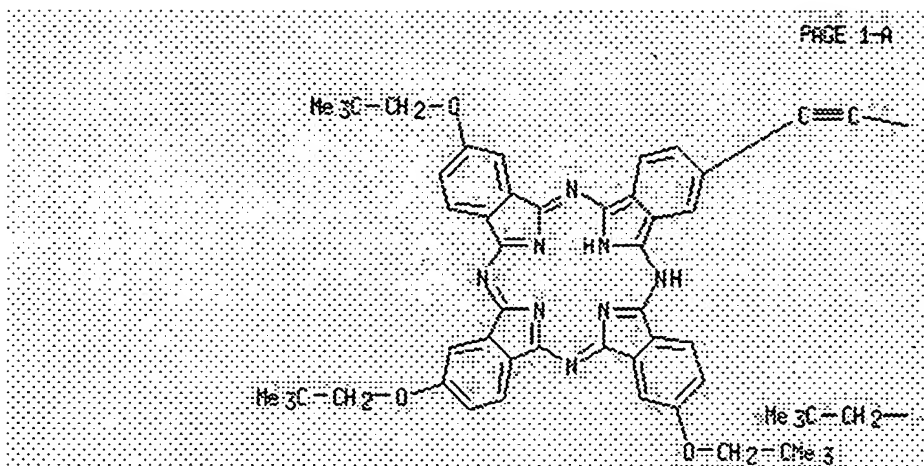


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

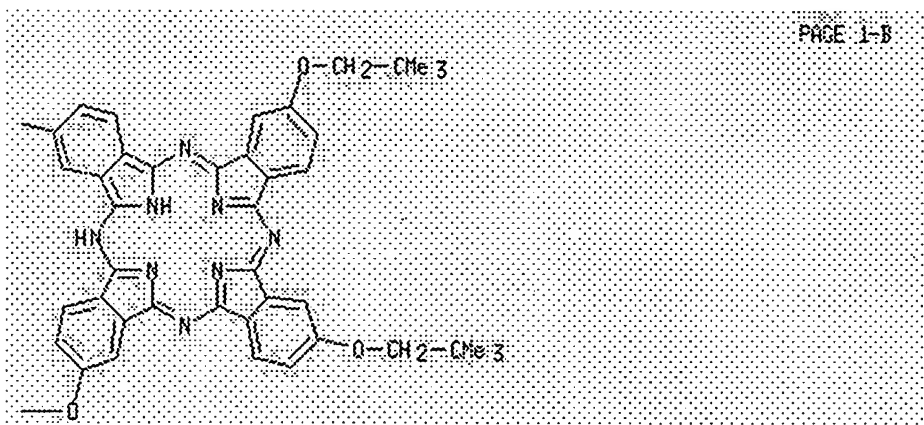
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN 29H,31H-Phthalocyanine, 2,2'-(1,2-ethynediyl)bis[9,16,23-tris(2,2-dimethylpropoxy)- (9CI)
 MF C96 H94 N16 O6

PAGE 1-A



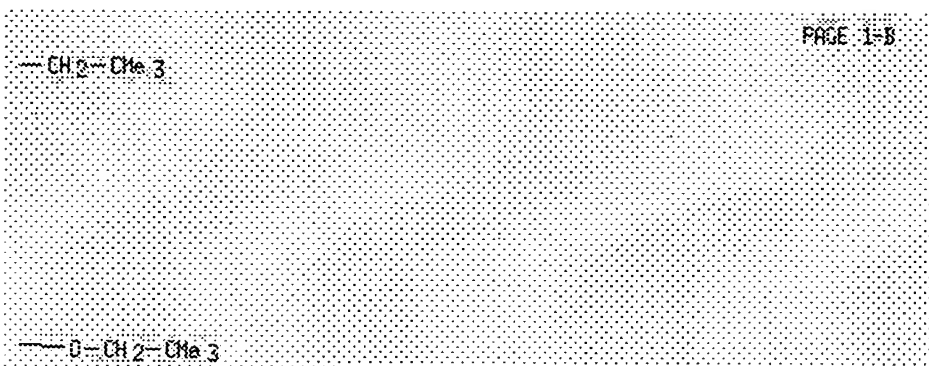
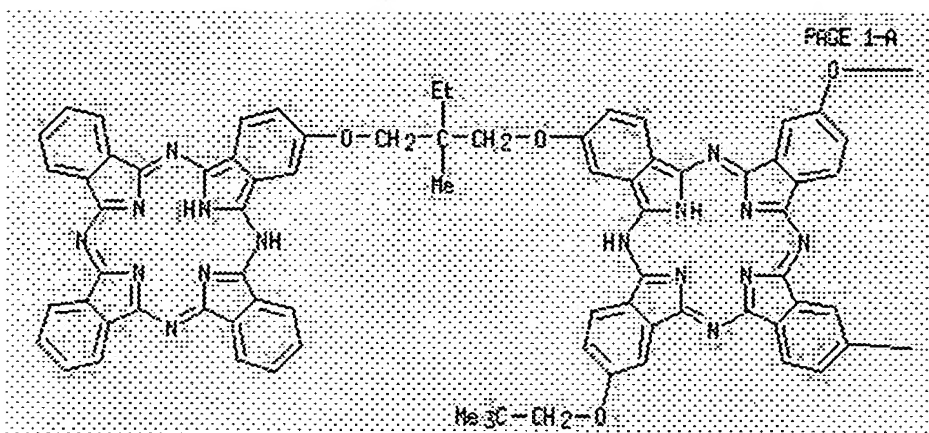
PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN 29H,31H-Phthalocyanine, 2,9,16-tris(2,2-dimethylpropoxy)-23-[2-methyl-2-
 [(29H,31H-phthalocyanin-2-yl)oxy]methyl]butoxy]- (9CI)
 MF C85 H76 N16 O5

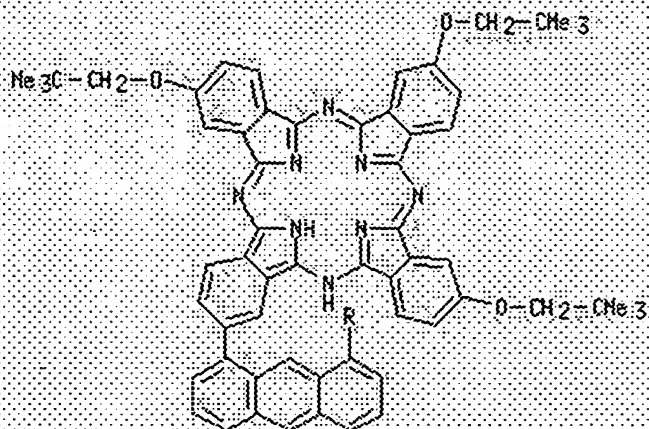


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

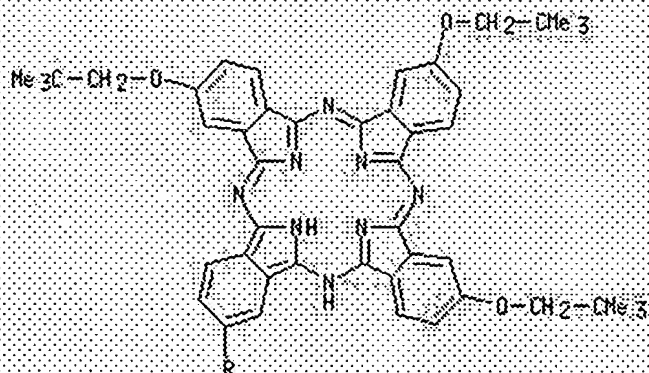
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN 29H,31H-Phthalocyanine, 2,2'-(1,8-anthracenediyl)bis[9,16,23-tris(2,2-dimethylpropoxy)- (9CI)
 MF C108 H102 N16 O6

PAGE 1-A



PAGE 2-A

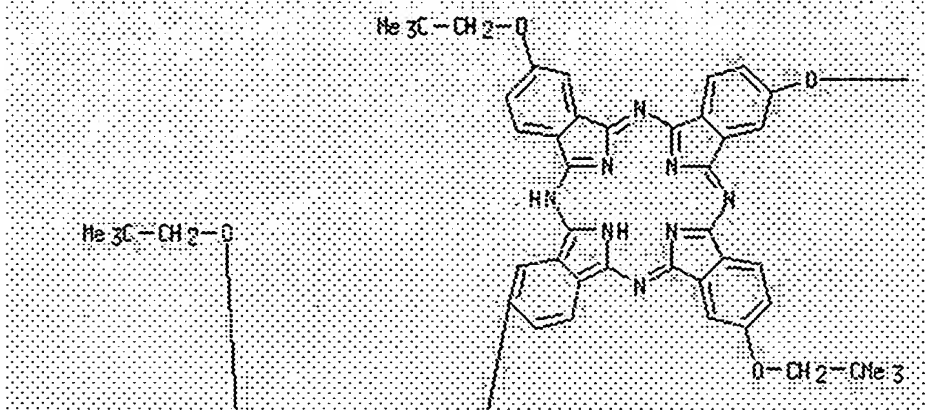


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

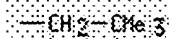
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN 2,2'-Bi-29H,31H-phthalocyanine, 9,9',16,16',23,23'-hexakis(2,2-dimethylpropoxy)-(9CI)
 MF C94 H94 N16 O6

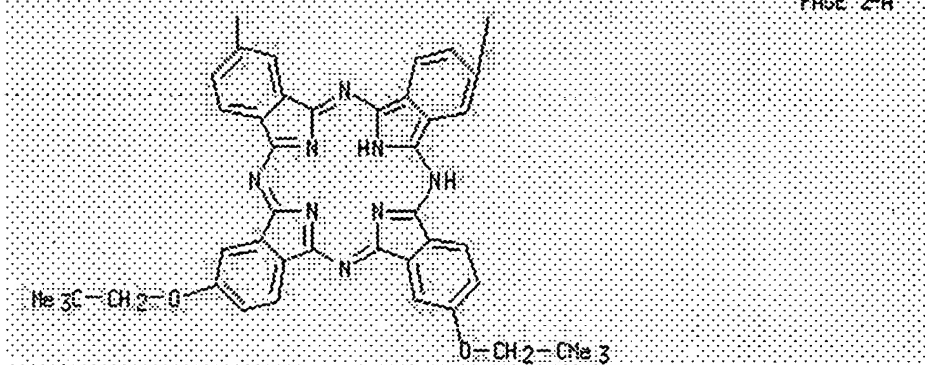
PAGE 1-A



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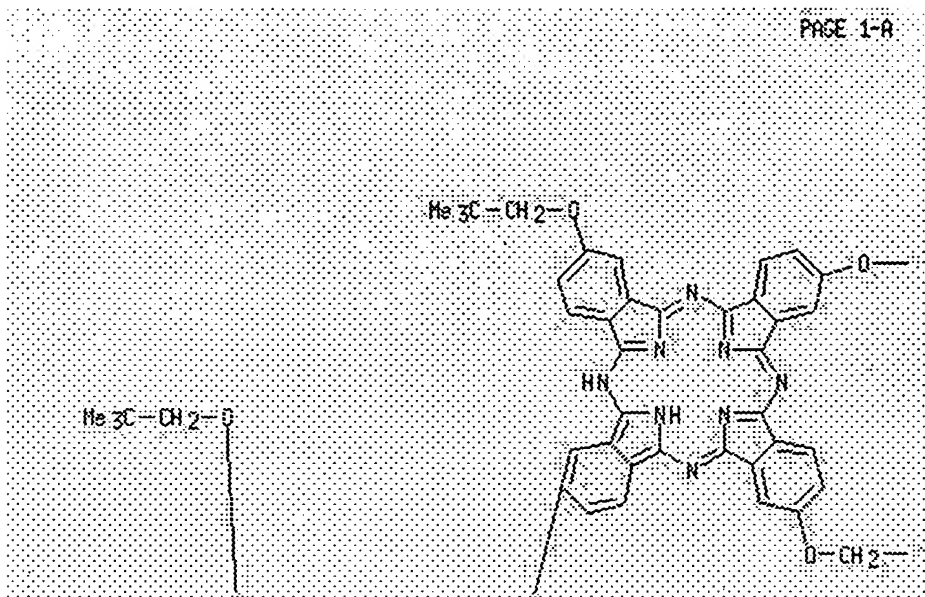
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

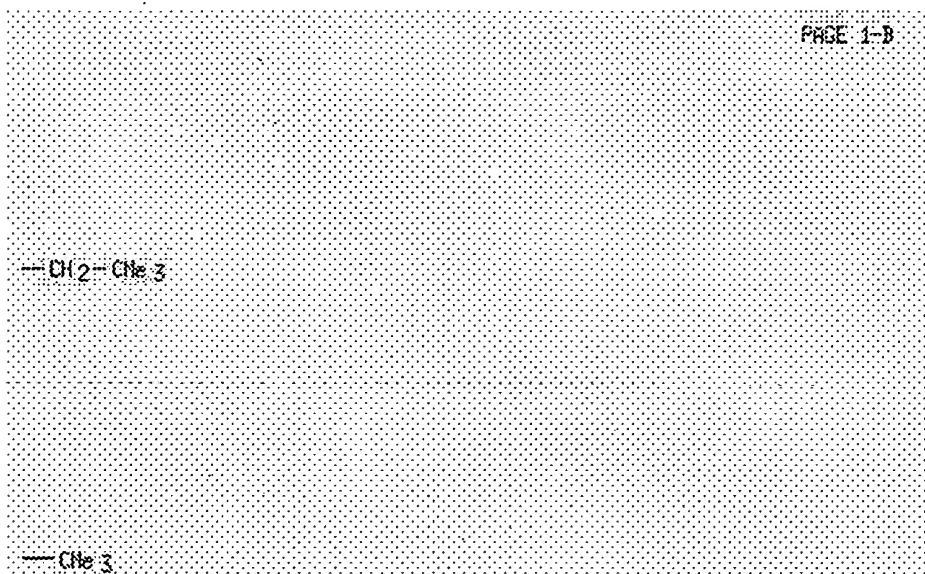
L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN 29H,31H-Phthalocyanine, 2,2'-oxybis[9,16,23-tris(2,2-dimethylpropoxy)-

(9CI)
MF C94 H94 N16 O7

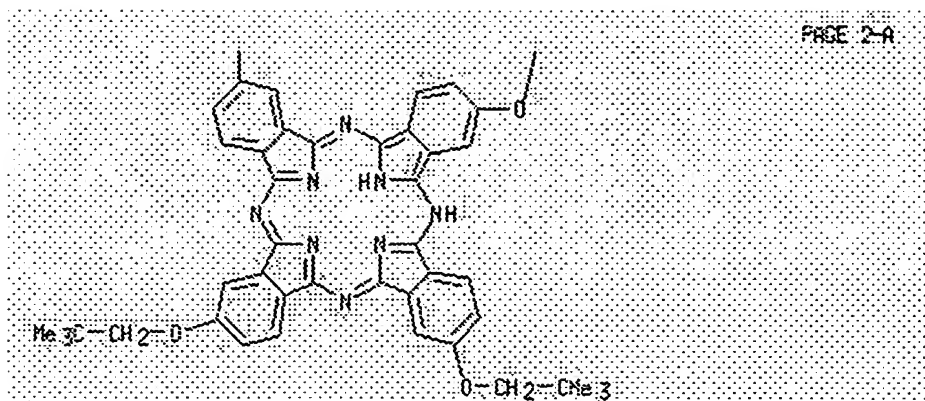
PAGE 1-A



PAGE 1-B



PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

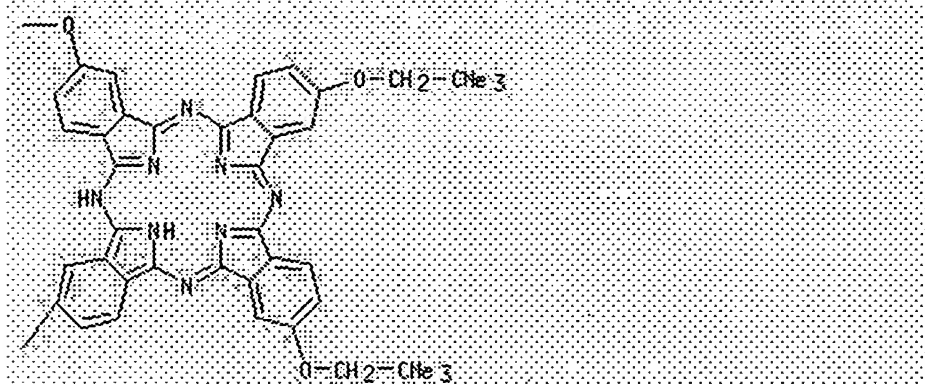
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L5 27 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN 29H,31H-Phthalocyanine, 2,2'-(1,2-ethanediyl)bis[9,16,23-tris(2,2-dimethylpropoxy)- (9CI)
 MF C96 H98 N16 O6

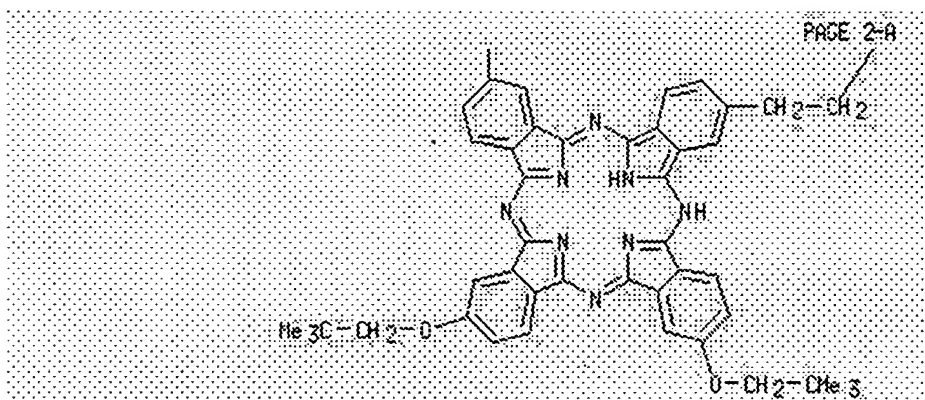
PAGE 1-A

Me₃C-CH₂-Me₃C-CH₂-O

PAGE 1-B



PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)end

=> s 19717-79-4/rn

L6 1 19717-79-4/RN

=> d rsd

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

Ring System Data

| Elemental Analysis EA | Elemental Sequence ES | Size of the Rings SZ | Ring System Formula RF | Ring Identifier RID | RID Occurrence Count |
|-----------------------------|-----------------------------|----------------------------|------------------------------|---------------------------|----------------------------|
| C4N-C4N-C4N- | NC4-NC4-NC4- | 5-5-5-5-6-6- | C32GaN8 | 13605.39.1 | 1 |
| C4N-C2GaN3- | NC4-GaNCNCN- | 6-6-6-6-6-6 | | | |
| C2GaN3- | GaNCNCN- | | | | |
| C2GaN3- | GaNCNCN- | | | | |

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C2GaN3-C6-C6-|GaNCNCN-C6-|
C6-C6          |C6-C6-C6   |

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=> s 16903-42-7/rn
L7      1 16903-42-7/RN

```

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=> d rsd

```

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L7  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2005 ACS on STN

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Ring System Data

| Elemental Analysis EA | Elemental Sequence ES | Size of the Rings SZ | Ring System Formula RF | Ring Identifier RID | RID Occurrence Count |
|-----------------------------|-----------------------------|----------------------------|------------------------------|---------------------------|----------------------------|
| C4N-C4N-C4N- | NC4-NC4-NC4- | 5-5-5-5-6-6- | C32N8Ti | 13605.79.1 | 1 |
| C4N-C2N3Ti- | NC4-NTiNCNC- | 6-6-6-6-6-6- | | | |
| C2N3Ti- | NTiNCNC- | | | | |
| C2N3Ti- | NTiNCNC- | | | | |
| C2N3Ti-C6-C6- | NTiNCNC-C6- | | | | |
| C6-C6 | C6-C6-C6 | | | | |

```

=> s 2 13605/rid
      8454941 2/RID.CNT
      24498 13605/RID
L8      598 2 13605/RID
          (2/RID.CNT (T) 13605/RID)

```

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=> s 18 and o/els
      22771773 O/ELS
L9      476 L8 AND O/ELS

```

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=> d scan

```

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L9  476 ANSWERS  REGISTRY  COPYRIGHT 2005 ACS on STN
IN  Silicate(2-), μ-oxodioxobis[29H,31H-phthalocyaninato(2-)-
    KN29,KN30,KN31,KN32]di-, dipotassium (9CI)
MF  C64 H32 N16 O3 Si2 . 2 K
CI  CCS

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STRUCTURE DIAGRAM IS NOT AVAILABLE

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

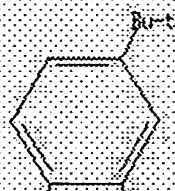
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

```

L9  476 ANSWERS  REGISTRY  COPYRIGHT 2005 ACS on STN
IN  Zinc, [μ-[[2,2'-[(3E,9E)-3,4,9,10-tetrakis[[[(1,1-
    dimethylethyl)dimethylsilyl]oxy]methyl]-3,9-dodecadiene-1,5,7,11-tetrayne-
    1,12-diyl]bis[9,16,23-tris(1,1-dimethylethyl)-29H,31H-phthalocyaninato-
    KN29,KN30,KN31,KN32]](4-)]di- (9CI)
MF  C128 H146 N16 O4 Si4 Zn2
CI  CCS

```

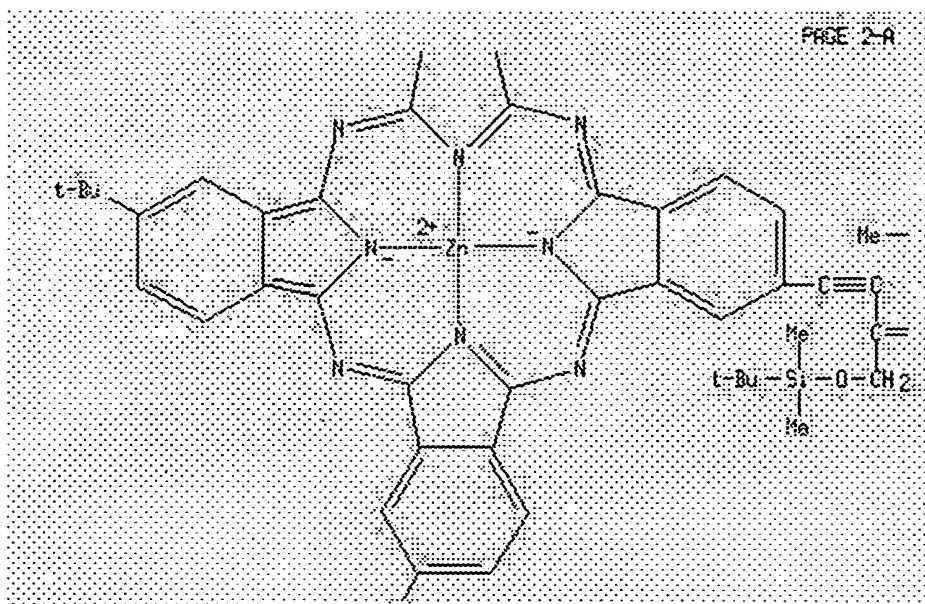
PAGE 1-A



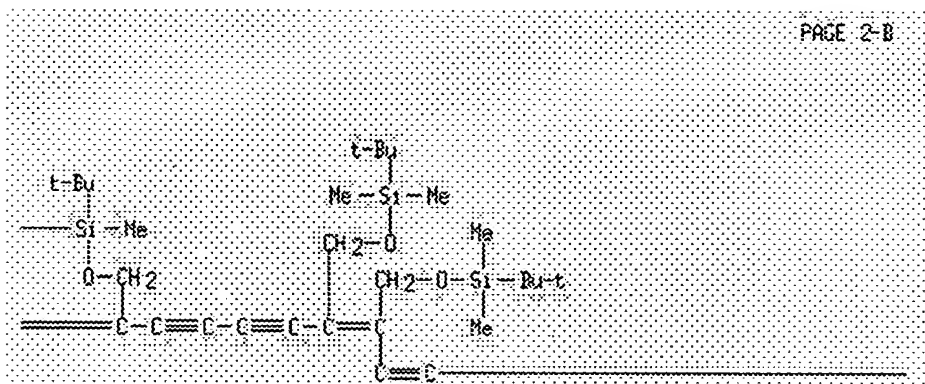
PAGE 1-C

Bu-t

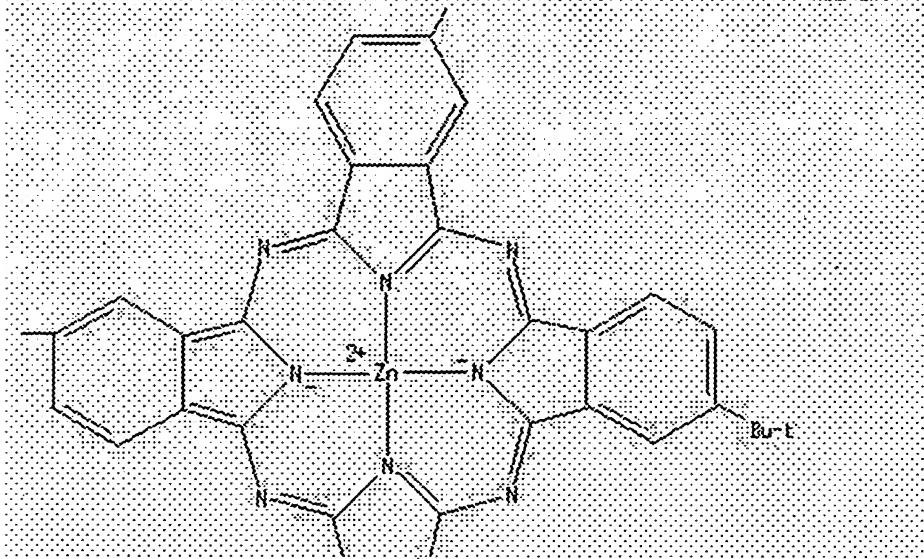
PAGE 2-A



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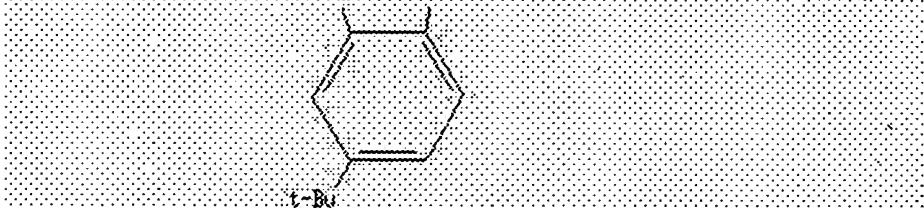
PAGE 2-C



PAGE 3-H

t-Bu

PAGE 3-C



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) .

L9 476 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Iron, μ -oxobis[2,9,16,23-tetraethyl-29H,31H-phthalocyaninato(2-)-
 N29,N30,N31,N32]di- (9CI)
 MF C80 H64 Fe2 N16 O
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) .

L9 476 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Silicon, hydroxy- μ -oxobis[29H,31H-tetrabenzob[b,g,l,q]porphinato(2-)-
 N29,N30,N31,N32](triethyl orthosilicato-O''')di- (9CI)
 MF C90 H80 N8 O6 Si3
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

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HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L9 476 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Iron, μ -methanetetraylbis[29H,31H-phthalocyaninato(2-)-
 N29,N30,N31,N32]bis(2-propanone)di- (9CI)
 MF C71 H44 Fe2 N16 O2
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L9 476 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Iron, μ -oxobis[N,N',N'',N'''-tetradodecyl-29H,31H-phthalocyanine-
 C,C,C,C-tetrasulfonamidato(2-)-N29,N30,N31,N32]di- (9CI)
 MF C160 H232 Fe2 N24 O17 S8
 CI CCS, IDS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)end

=> d his

(FILE 'HOME' ENTERED AT 14:19:39 ON 18 OCT 2005)

FILE 'REGISTRY' ENTERED AT 14:19:53 ON 18 OCT 2005

L1 1 S 574-93-6/RN
 L2 1 S 23627-89-6/RN
 L3 34 S 2 13560.6.4/RID
 L4 33 S L3 AND NC=1
 L5 27 S L4 AND O/ELS
 L6 1 S 19717-79-4/RN
 L7 1 S 16903-42-7/RN
 L8 598 S 2 13605/RID
 L9 476 S L8 AND O/ELS

=> s 19 and nc=1

79137461 NC=1

L10 398 L9 AND NC=1

=> s 110 and oxobis

14642 OXOBIS

L11 159 L10 AND OXOBIS

=> s 110 and oxo not 111

4287424 OXO

L12 63 L10 AND OXO NOT L11

=> d scan

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Molybdenum(1+), μ -oxo[29H,31H-phthalocyaninato(2-)-
 KN29,KN30,KN31,KN32][[29H,31H-phthalocyaninato(2-)-
 KN29,KN30,KN31,KN32]gallium]- (9CI)
 MF C64 H32 Ga Mo N16 O
 CI CCS, COM

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

STN Columbus

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Ruthenium(2+), bis[(4-methylpyridine)[29H,31H-phthalocyaninato(2-)-
 KN29,KN30,KN31,KN32]iron]di-μ-oxo[5,10,15,20-
 tetrakis(4-methoxyphenyl)-21H,23H-porphinato(2-)-
 KN21,KN22,KN23,KN24]- (9CI)
 MF C124 H82 Fe2 N22 O6 Ru
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Silicate(1-), dimethylbis[2,3,9,10,16,17,23,24-octapentyl-29H,31H-
 phthalocyaninato(2-)-KN29,KN30,KN31,KN32]-μ-
 oxodi- (9CI)
 MF C146 H198 N16 O Si2
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Iron, bis(1-methyl-1H-imidazole-KN3)bis[1,4,8,11,15,18,22,25-
 octakis(trifluoromethyl)-29H,31H-phthalocyaninato(2-)-
 KN29,KN30,KN31,KN32]-μ-oxodi- (9CI)
 MF C88 H28 F48 Fe2 N20 O
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

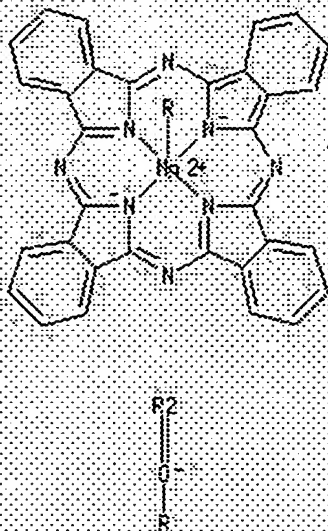
L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Indium, μ-oxo[[29H,31H-phthalocyaninato(2-)-
 N29,N30,N31,N32]aluminum][2,9,16,23-tetrakis(1,1-dimethylethyl)-29H,31H-
 tetrabenzo[b,g,l,q]porphinato(2-)-N29,N30,N31,N32]- (9CI)
 MF C84 H68 Al In N12 O
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

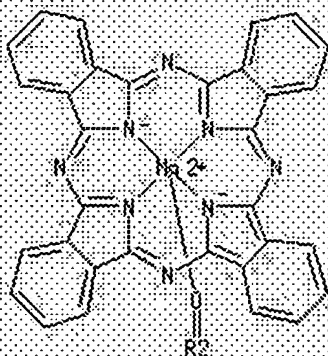
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Magnesate(1-), bis[29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32][μ-
 (superoxido-O:O')]di- (9CI)
 MF C64 H32 Mg2 N16 O2
 CI CCS

PAGE 1-A



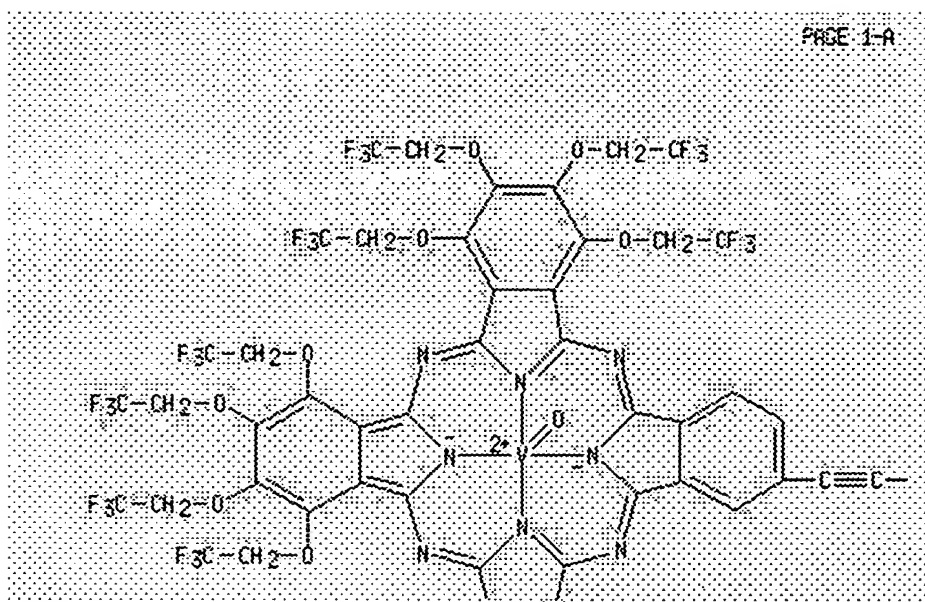
PAGE 2-A



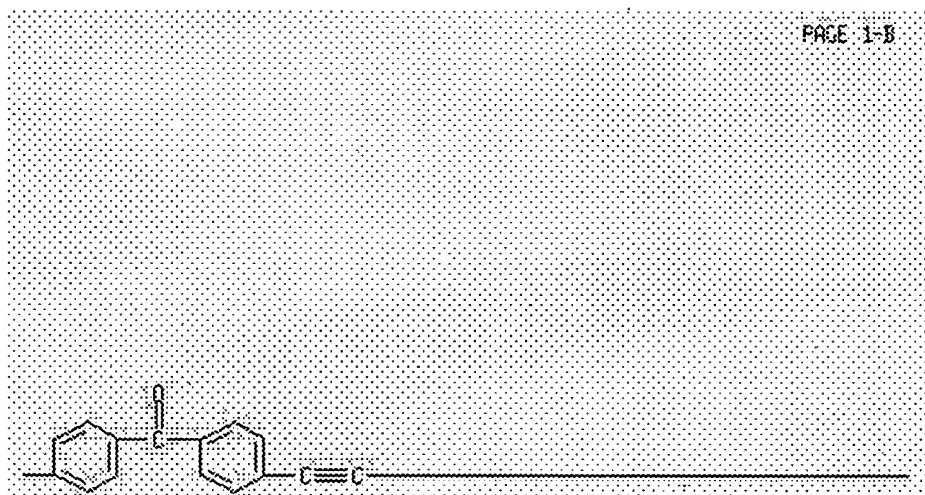
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Vanadium, [μ -[bis[4-[[8,9,10,11,15,16,17,18,22,23,24,25-dodecakis(2,2,2-trifluoroethoxy)-29H,31H-phthalocyanin-2-yl- κ N29, κ N30, κ N31, κ N32]ethynyl]phenyl]methanonato(4- η^2)]dioxodi- (9CI)
 MF C129 H62 F72 N16 O27 V2
 CI CCS

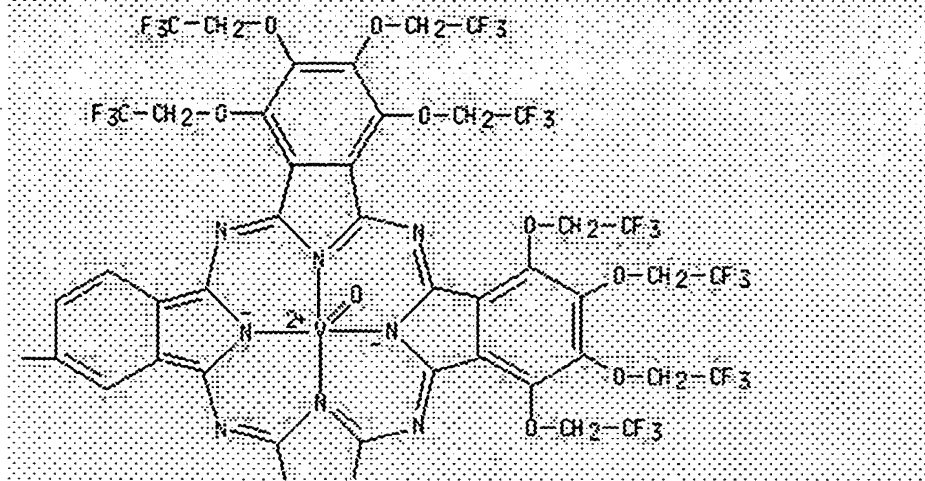
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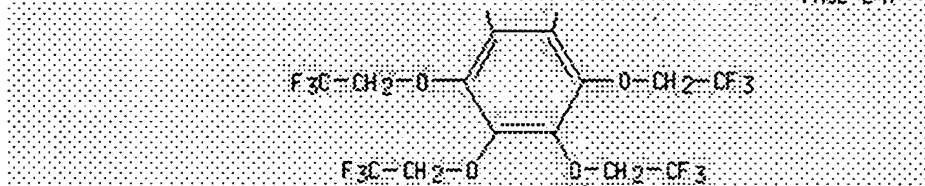
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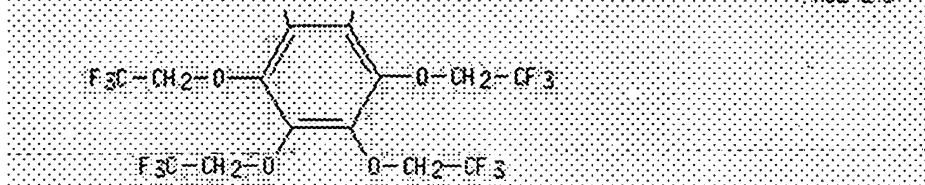
PAGE 1-C



PAGE 2-A



PAGE 2-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Ruthenium, [(4-methylpyridine)bis[29H,31H-phthalocyaninato(2-)-
 KN29,KN30,KN31,KN32](triethyl phosphite-
 KP)diiron]di-μ-oxo[5,10,15,20-tetrakis(4-methoxyphenyl)-21H,23H-
 porphinato(2-)-KN21,KN22,KN23,KN24]- (9CI)
 MF C124 H90 Fe2 N21 O9 P Ru
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

STN Columbus

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Silicon, bis(2-mercaptoethanolato-KO)bis[2,3,9,10,16,17,23,24-octapentyl-29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,.kappa.N32]-μ-oxodi- (9CI)
 MF C148 H202 N16 O3 S2 Si2
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Silicon, bis[(1,1-dimethylethyl)dimethylsilanolato]bis[2,3,9,10,16,17,23,24-octaoctyl-29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,KN32]-μ-oxodi-, stereoisomer (9CI)
 MF C204 H318 N16 O3 Si4
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Iron, bis[2,3,9,10,16,17,23,24-octakis(pentyloxy)-29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-μ-oxodi- (9CI)
 MF C144 H192 Fe2 N16 O17
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

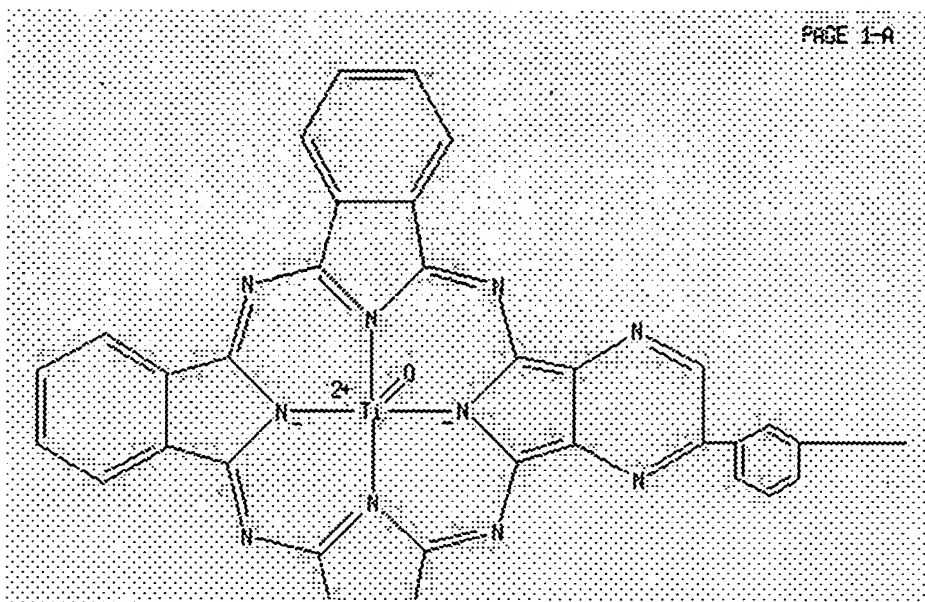
L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Titanium(1+), μ-oxo[[29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,KN32]gallium][C,C,C,C-tetrakis(1,1-dimethylethyl)-29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,KN32]- (9CI)
 MF C80 H64 Ga N16 O Ti
 CI CCS, IDS, COM

STRUCTURE DIAGRAM IS NOT AVAILABLE

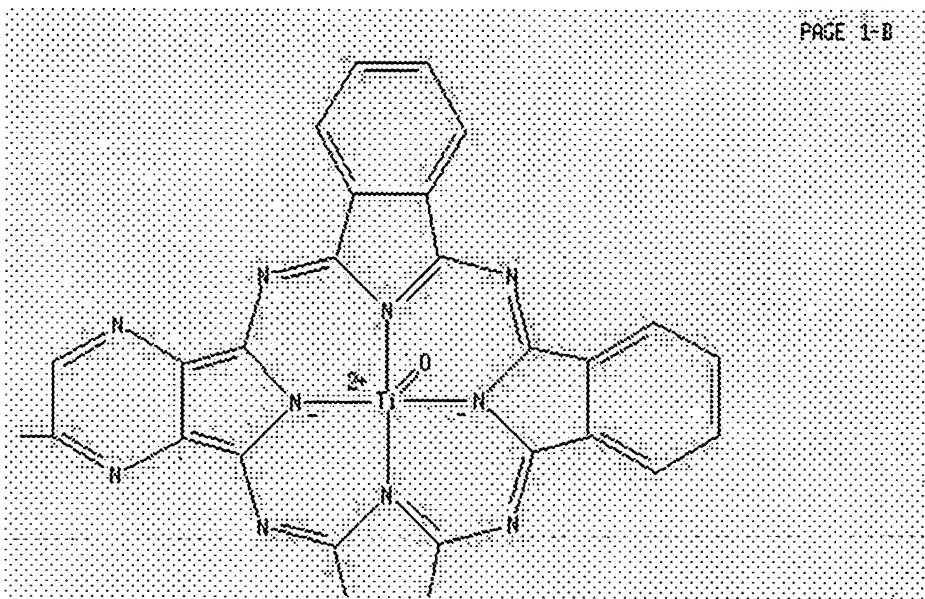
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Titanium, dioxo[μ-[[2,2'-(1,3-phenylene)bis[29H,31H-tribenzo[b,g,l]pyrazino[2,3-q]porphyrizinato-KN29,KN30,KN31,KN32]](4-)]di- (9CI)
 MF C66 H30 N20 O2 Ti2
 CI CCS

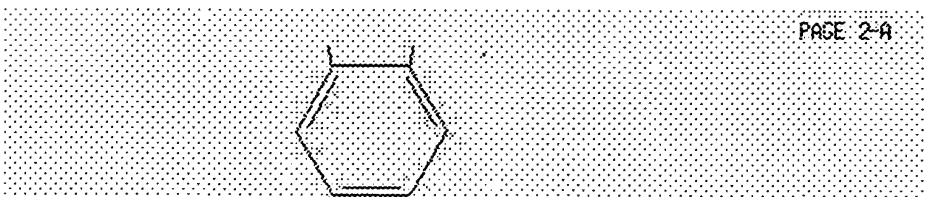
PAGE 1-A

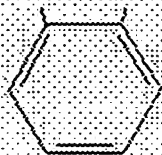


PAGE 1-B



PAGE 2-A





HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Ruthenium, bis[(1-methyl-1H-imidazole- κ N3)[29H,31H-phthalocyaninato(2-)- κ N29, κ N30, κ N31, κ N32]iron]di-
 μ -oxo[5,10,15,20-tetrakis(4-methoxyphenyl)-21H,23H-porphinato(2-)-
 κ N21, κ N22, κ N23, κ N24]- (9CI)
 MF C120 H80 Fe2 N24 O6 Ru
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Silicon, dimethylbis[2,3,9,10,16,17,23,24-octakis(pentyloxy)-29H,31H-phthalocyaninato(2-)- κ N29, κ N30, κ N31, κ N32]- μ -
 oxodi- (9CI)
 MF C146 H198 N16 O17 Si2
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Iron, bis[2,3,9,10,16,17,23,24-octakis[(2-ethylhexyl)oxy]-29H,31H-phthalocyaninato(2-)- κ N29, κ N30, κ N31, κ N32]- μ -oxodi- (9CI)
 MF C192 H288 Fe2 N16 O17
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L12 63 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Germanium, [(dimethyloctadecylsilanolato)[29H,31H-phthalocyaninato(2-)- κ N29, κ N30, κ N31, κ N32]silicon]hydroxy- μ -oxo[29H,31H-phthalocyaninato(2-)- κ N29, κ N30, κ N31, κ N32]- (9CI)
 MF C84 H76 Ge N16 O3 Si2
 CI CCS

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)end

=> d his

(FILE 'HOME' ENTERED AT 14:19:39 ON 18 OCT 2005)

FILE 'REGISTRY' ENTERED AT 14:19:53 ON 18 OCT 2005

L1 1 S 574-93-6/RN
 L2 1 S 23627-89-6/RN

STN Columbus

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L3      34 S 2 13560.6.4/RID
L4      33 S L3 AND NC=1
L5      27 S L4 AND O/ELS
L6      1 S 19717-79-4/RN
L7      1 S 16903-42-7/RN
L8      598 S 2 13605/RID
L9      476 S L8 AND O/ELS
L10     398 S L9 AND NC=1
L11     159 S L10 AND OXOBIS
L12     63 S L10 AND OXO NOT L11
```

=> fil ca

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 46.10 | 46.31 |

FILE 'CA' ENTERED AT 14:30:51 ON 18 OCT 2005
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FILE COVERS 1907 - 13 Oct 2005 VOL 143 ISS 17
 FILE LAST UPDATED: 13 Oct 2005 (20051013/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l12

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L13      40 L12
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=> s l13 and (electrophotog? or photoconduct? or photorecept?)

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65692 ELECTROPHOTOG?
```

```
66593 PHOTOCONDUCT?
```

```
34517 PHOTORECEPT?
```

```
L14      4 L13 AND (ELECTROPHOTOG? OR PHOTOCONDUCT? OR PHOTORECEPT?)
```

=> d fbib ab hitstr 1-4

L14 ANSWER 1 OF 4 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 136:270453 CA

TI Electrophotographic photoreceptor containing tetraazaporphyrin derivative and charge-transporting polymer

IN Komai, Yuko; Nanba, Michihiko; Shimada, Tomoyuki; Shoshi, Masayuki; Tadokoro, Kaoru; Tanaka, Chiaki; Sasaki, Masaomi

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 57 pp.

CODEN: JKXXAF

STN Columbus

DT Patent
 LA Japanese
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| | ----- | --- | --- | ----- | ----- |
| PI | JP 2002082460 | A2 | 20020322 | JP 2000-269095 | 20000905 |
| | | | | JP 2000-269095 | 20000905 |

OS MARPAT 136:270453

AB The title **photoreceptor** has light-sensitive layers contg. a tetraazaporphyrin deriv. mixt. and a charge-transporting compd. on an electroconductive support, wherein the tetraazaporphyrin deriv. mixt. contains metal bis(tetraazaporphyrin deriv.) I (R101 = H, alkyl, aryl; R102-105 = H, halo, alkyl, aryl, cycloalkyl, nitro, cyano; n = 1-2; M = metal, metal oxide, metal hydroxide, etc.) and a metal tetraazaporphyrin deriv. The **photoreceptor** shows the high sensitivity and the good wearing-resistance.

IT 405113-32-8P 405113-33-9P 405113-34-0P

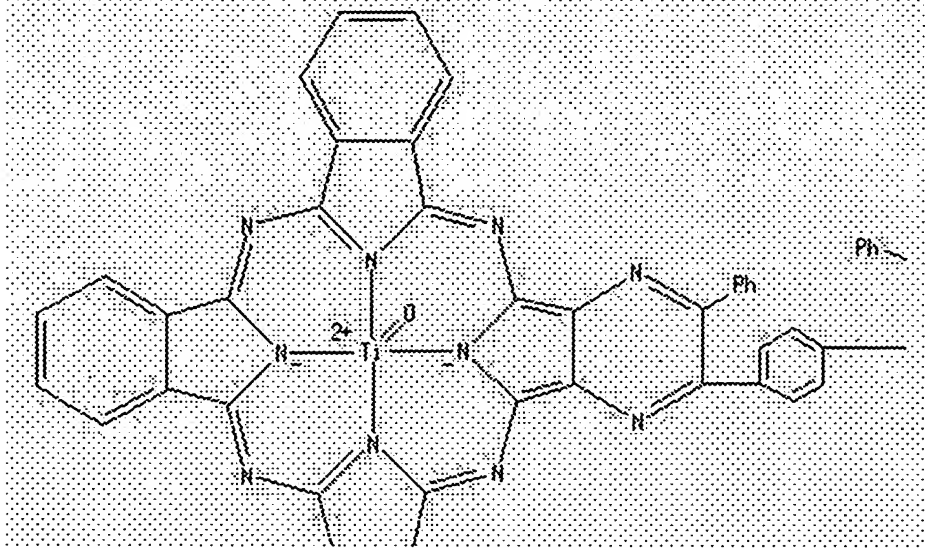
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (tetraazaporphyrin deriv. in electrophotog.
photoreceptor)

RN 405113-32-8 CA

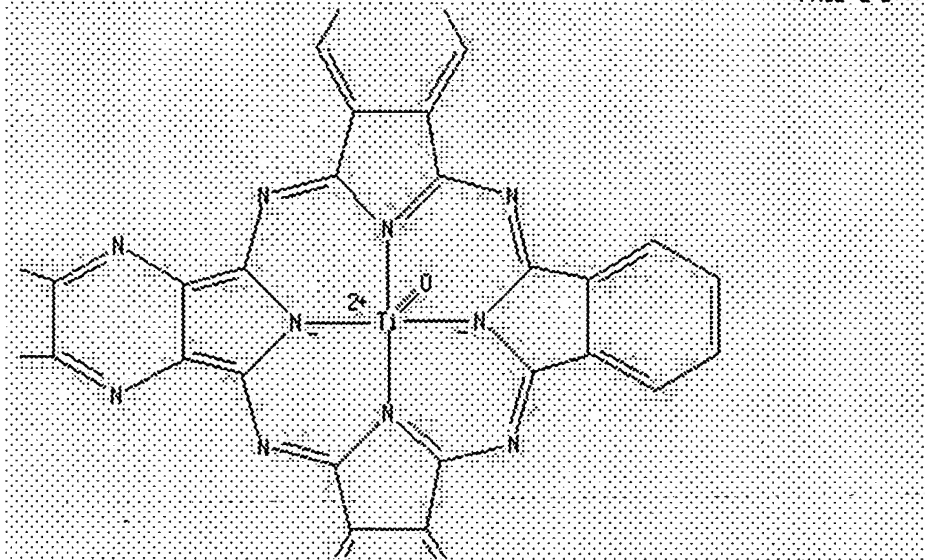
CN Titanium, dioxo [μ -[2,2'-(1,4-phenylene)bis(3-phenyl-29H,31H-tribenzo[b,g,l]pyrazino[2,3-q]porphyrizinato-KN29,KN30, κ N31,KN32)](4-)]di- (9CI) (CA INDEX NAME)

PAGE 1-B

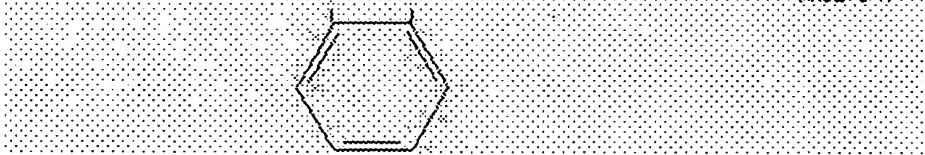
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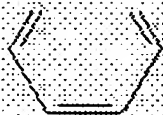
PAGE 2-B



PAGE 3-A



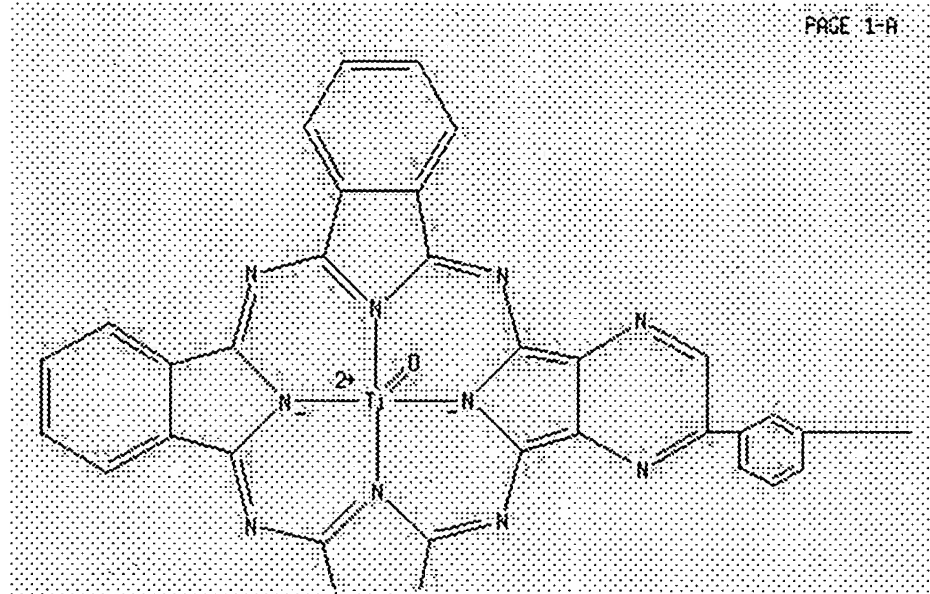
PAGE 3-B



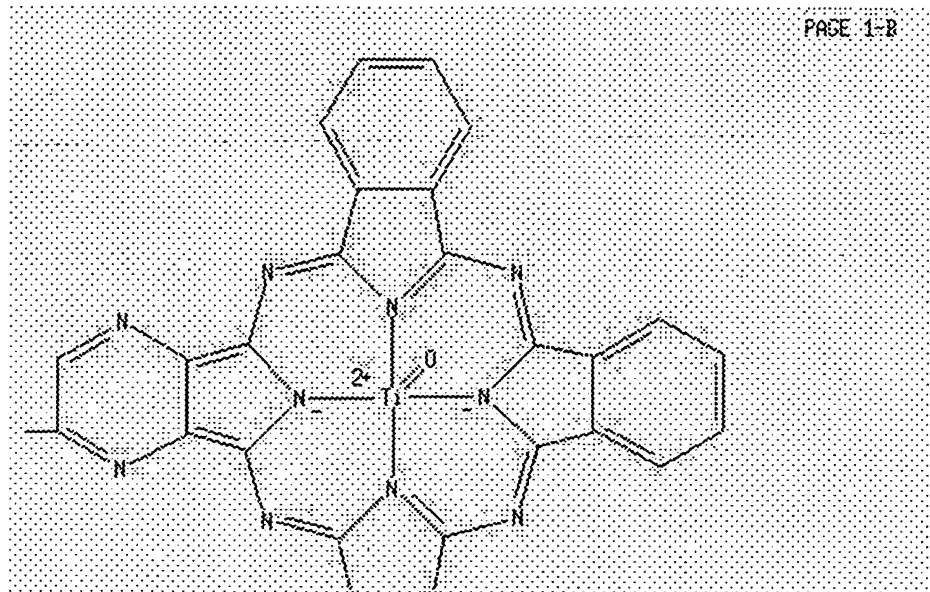
RN 405113-33-9 CA

CN Titanium, dioxo [μ -{[2,2'-(1,3-phenylene)bis[29H,31H-tribenzo[b,g,1]pyrazino[2,3-q]porphyrinato- κ N29, κ N30, κ N31, κ N32]](4-)]}]di- (9CI) (CA INDEX NAME)

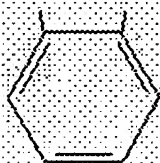
PAGE 1-A



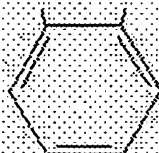
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PAGE 2-A



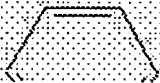
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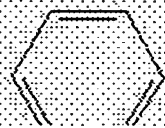
RN 405113-34-0 CA

CN Titanium, dioxo[μ-[[2,2'-(1,4-phenylene)bis[29H,31H-tribenzo[b,g,l]pyrazino[2,3-q]porphyrazinato-κN29,κN30,κN31,κN32]](4-)]di- (9CI) (CA INDEX NAME)

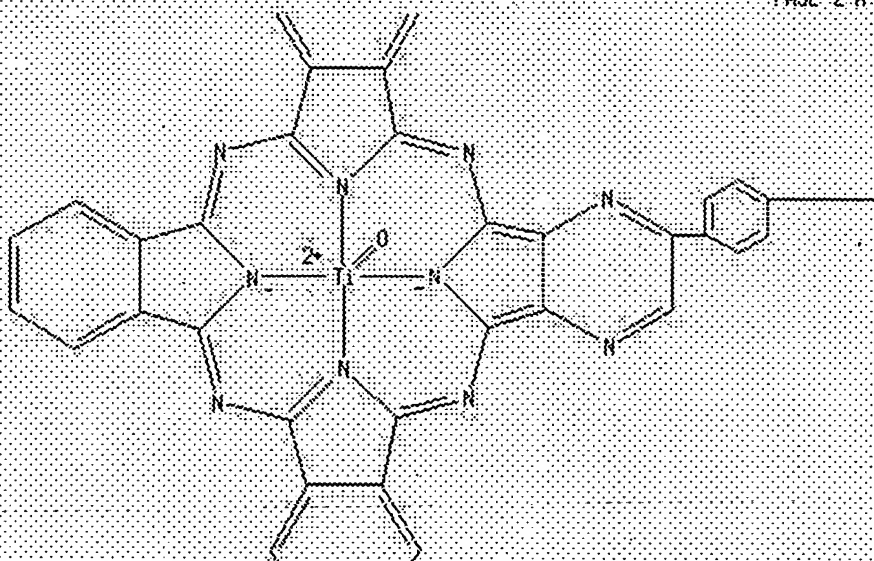
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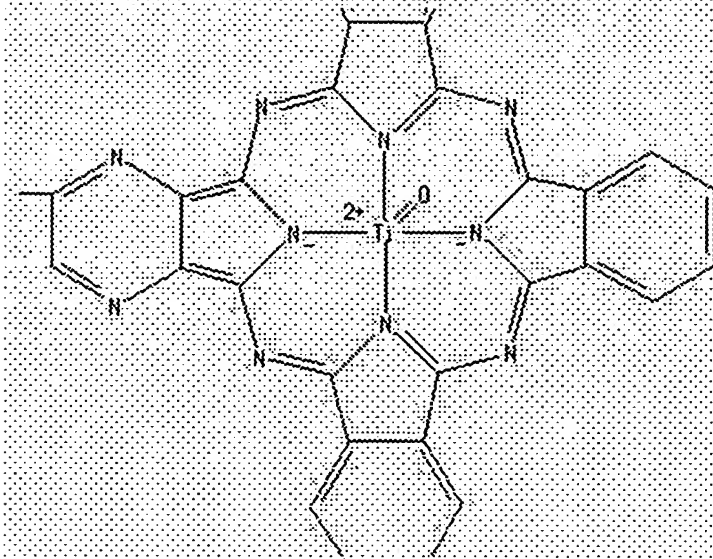
PAGE 1-B



PAGE 2-B



PAGE 2-B



PAGE 3-A



PAGE 3-B



L14 ANSWER 2 OF 4 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 133:18773 CA

TI Oxoaluminum/gallium phthalocyanine dimers

IN Yamasaki, Yasuhiro; Takaki, Kenji; Kuroda, Kazuyoshi

PA Orient Chemical Industries, Ltd., Japan

SO Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------------|
| PI | EP 1004634 | A2 | 20000531 | EP 1999-123213 | 19991125 |
| | EP 1004634 | A3 | 20020306 | | |
| | EP 1004634 | B1 | 20031008 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | | | | JP 1998-335729 | A 19981126 |
| | US 6093514 | A | 20000725 | US 1999-444697 | 19991124 |
| | | | | JP 1998-335729 | A 19981126 |
| | JP 2000219817 | A2 | 20000808 | JP 1999-334128 | 19991125 |
| | | | | JP 1998-335729 | A 19981126 |

AB The μ -oxoaluminum/gallium phthalocyanine dimers and their mixed crystals are suitable as a charge generating material for an org.

photoconductive material, such as an electrophotog. photoreceptor. Thus, hydrolyzing a mixt. of 0.01 mol chlorogallium phthalocyanine and 0.01 mol. chloroaluminum phthalocyanine with conc. H₂SO₄ followed by dehydrating the resulting hydroxymetal phthalocyanine mixt. gave an μ -oxo-aluminum/gallium phthalocyanine dimer.

IT 256647-36-6P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(μ -oxoaluminum/gallium phthalocyanine dimers)

RN 256647-36-6 CA

CN Gallium, μ -oxo[29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,KN32][[29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,KN32]aluminum]- (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

L14 ANSWER 3 OF 4 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 132:144318 CA

TI μ -Oxo-bridged type aluminum and gallium phthalocyanine dimer - Synthesis, polymorphs and its primary evaluation as an electrophotographic receptor

AU Yamasaki, Yasuhiro; Takaki, Kenji; Kuroda, Kazuyoshi

CS 3rd R D Center, R D Department, Orient Chemical Industries, Ltd., Neyagawa-shi, 572-8581, Japan

SO Nippon Kagaku Kaishi (1999), (12), 841-845
CODEN: NKAKB8; ISSN: 0369-4577

PB Nippon Kagakkai

DT Journal

LA Japanese

AB We already found and reported that the specific polymorphs of μ -oxo-aluminum phthalocyanine dimer and μ -oxo-gallium phthalocyanine dimer have fairly good characteristics as the electrophotog. receptor. In connection with our ongoing works on this field, we are interested in the synthesis of μ -oxo-bridged dimers of diverse metal phthalocyanines for pursuing various charge generating materials in electrophotog. receptors. We report here the results of studies on the polymorphs of the titled phthalocyanine dimer, ie. μ -oxo-bridged between aluminum and gallium phthalocyanine dimer, and their primary electrophotog. evaluation.

IT 256647-36-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis of μ -oxo-bridged type aluminum and gallium phthalocyanine dimer)

RN 256647-36-6 CA

CN Gallium, μ -oxo[29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,KN32][[29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,KN32]aluminum]- (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

L14 ANSWER 4 OF 4 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 120:148867 CA

TI High-photosensitivity electrophotographic photoreceptor

IN Tai, Seiji; Katayose, Mitsuo; Morishita, Yoshii

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

STN Columbus

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PI  JP 04362653      A2    19921215      JP 1991-138909      19910611
                                   JP 1991-138909      19910611
AB  In the title electrophotog. photoreceptor comprising an org.
    photoconductive layer on an elec. conductive support, I [M = Al, Ga, In,
    Si, Ge, Sn; Al-8 = benzene ring, naphthalene ring, anthracene ring,
    N-contg. arom. ring; X = halo, R1, OR2, SR3, SiR4R5R6, SO2NR7R8, SO2R9,
    COR10, COOR11, CONHR12, NR13R14, R15OR16, NO2, SO3H, CN, NHCOR17; g, h, i,
    j, k, l, m, n = 0-8; Y1,2 = halo, OH, R18, OR19, OSiR20R21R22; R1-22 = H,
    alkyl, cycloalkyl, aryl, halogenated alkyl, Si-contg. group] is utilized
    as a photoconductive substance in the photoconductive layer. The
    photoreceptor shows high photosensitivity to the long wavelength region
    and is suitable for use in a laser printer.
IT  151989-12-7
    RL: USES (Uses)
        (charge-generating material, for electrophotog.
        photoreceptor)
RN  151989-12-7  CA
CN  Silicon,  $\mu$ -oxo[29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32] [C,C,C,C-
    tetrakis(trimethylsilyl)-29H,31H-phthalocyaninato(2-)-
    N29,N30,N31,N32]bis(tripropylsilanolato)di- (9CI) (CA INDEX NAME)
    STRUCTURE DIAGRAM IS NOT AVAILABLE

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=>